

REMARKS

I. Introduction

This Amendment is responsive to the January 29, 2007 final Office Action. Claims 22-30, 32-35, 38, 41-49 and 52-57 are pending in this application and claims 22, 24-26, 29-30, 38, 52, and 55-56 are amended in the foregoing amendments. Claims dependent 24-26, 29-30, and 55-56 are amended for antecedent basis reasons only. Claims 50-51 are cancelled in the foregoing amendments without prejudice and to expedite prosecution of this application. Applicants' cancellation of claims 50-51 should not be construed as an acceptance of the finality of the rejections of these claims under 35 U.S.C. §112, first paragraph. These claims are properly the subject of a future continuation application from the present application. Finally, the Examiner is thanked for the prompt return of the undersigned's telephone call on March 15, 2007 and consideration of the issues raised in that telephone call.

II. 35 U.S.C. §103(a) Rejections

Claims 22-28, 30, 32-35, 38, and 41-57 stand rejected under 35 USC § 103(a) for obviousness over United States Patent No. 5,592,940 to Kampfe in view of United States Patent No. 4,901,731 to Millar. Claim 29 stands rejected under 35 USC § 103(a) for obviousness over Kampfe in view of Millar and further in view of United States Patent Nos. 5,569,181 to Heilman or 5,433,704 to Ross et al. Applicant respectfully traverses the rejection of these claims for the following reasons.

Kampfe discloses a device for formulating contrast media. The device (10) includes a container (12) for contrast medium and a container (14) for solvent or diluent. Containers (12, 14) are connected to a mixing chamber by feed pipes (16, 18). Feed pipes (16, 18) are brought together to form a single pipe (19) that empties into a mixing chamber (20). A delivery pipe (22) is connected to an end pipe which may be connected to a vial, bag, or syringe to fill the same. Metering elements (26, 28) are associated with feed pipes (16, 18), respectively. Metering elements (26, 28) may be peristaltic pumps. A control unit (42) is operable to control operation of metering pumps (26, 28).

Millar at column 6, lines 60-66 generally describes that dilation balloon (52) may be filled under pressure with a mixture of contrast media and saline solution as a means for inflating balloon (52). Heilman and Ross are cited in connection with claim 29 drawn to an air detector for use in a fluid delivery system.

Independent claims 22, 38, and 52 include clarifying language relating to the fluid path of the fluid delivery system. This clarifying language divides the fluid path into a reusable fluid path and a per-patient disposable fluid path. The reusable fluid path is for delivering fluid to multiple patients and includes a first source of fluid medium and an associated pressurizing device and a second source of fluid medium and an associated pressurizing device. The per-patient disposable fluid path is operable to deliver the first and second fluid media at least to a balloon catheter in a patient. The per-patient disposable fluid path includes a valve, a tube, and a per-patient connector. The clarifying language further extends to the per-patient disposable fluid path being connected to the reusable fluid path before the first and second fluid media are delivered at least to the balloon catheter, and being disconnected from the reusable fluid path after the first and second fluid media are delivered at least to the balloon catheter.

Applicants traverse the rejections of independent claims 22, 38, and 52 for obviousness over Kampfe in view of Millar for the following reasons. It is clear from a close inspection of Kampfe that the disclosed fluid path arrangement does not provide the ability to service multiple patients as no per-patient disposable fluid path is present in any form in the Kampfe fluid path. As indicated previously, the claimed fluid path is divided into a reusable fluid path and a per-patient disposable fluid path which is a structure that is not taught or suggested by Kampfe. In the Kampfe disclosure, discharge valve (66) is the terminal point of fluid delivery pipe (22) and is used as a discharge point for filling “vials, bags or syringe arrangements” to be associated with the patient. Accordingly, there is a complete absence of per-patient disposable fluid path comprising, for example, a valve, a tube, and a per-patient connector in the Kampfe fluid path, as now set forth in claims 22, 38, and 52. The intimation in the final Office Action that “valves 56, 62, 66 a tube such as formed by element 22 and a per-patient connect provided by valve 66 and end of tube 24” somehow form a fluid path constituting a reusable fluid path and a per-patient disposable fluid path is not supported by the Kampfe disclosure, directly or indirectly. Discharge valve (66) is the fill point for “vials, bags or syringe arrangements” which, while possibly being disposable, are not a per-patient disposable fluid path comprising, for example, a valve, a tube, and a per-patient connector used to deliver injection fluid to patient. Therefore, for the foregoing reasons, claims 22, 38, and 52 are respectfully submitted as distinguishing over Kampfe in view of Millar. The teachings in Heilman or Ross directed to an air detector used in a fluid delivery system do not correct the foregoing

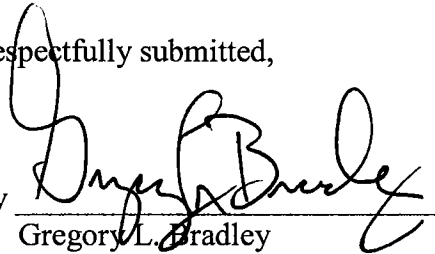
deficiencies of Kampfe in view of Millar. Reconsideration of the rejections of independent claims 22, 28, and 52 over Kampfe in view of Millar and allowance of the same are respectfully requested.

Claims 23-30 and 32-35, 41-49, and 53-57 depend from independent claims 22, 38, and 52, and distinguish over Kampfe in view of Millar for the reasons set forth hereinabove. Allowance of pending claims 22-30, 32-35, 38, 41-49, and 52-57 is respectfully requested.

III. Conclusion

Should the Examiner have any questions regarding any of the foregoing or wish to discuss this application in further detail to advance prosecution, the Examiner is invited to contact Applicants' undersigned representative at the telephone number provided below.

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Respectfully submitted,

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